

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (Currently Amended) A micro-resonator comprising:

a substrate;

a plurality of micro-resonator devices having a beam structure on said substrate,

wherein,

said beam structure includes a at least two physically unconnected vibrating electrode beams that beam are parallel to each other and cross over a portion of the substrate, and

said micro-resonator devices are electrically connected in parallel.

2. (Cancelled)

3. (Previously Presented) A micro-resonator according to claim 1, wherein each of said plurality of micro-resonator devices is composed of:

an input electrode on the same plane as the substrate,

an output electrode on the same plane as the substrate and parallel to the input electrode,

a space between the input electrode and the output electrode,

a vibrating electrode beam serving as a diaphragm crossing over the space between the input electrode and the output electrode and in an opposing relation to the input electrode and the output electrode.

4. (Currently Amended) A micro-resonator comprising:

a substrate;

a plurality of micro-resonator devices having a beam structure on said substrate,

wherein,

said beam structure includes a vibrating electrode beam,

said micro-resonator devices are electrically connected in parallel,

A micro-resonator according to claim 1, wherein each of said plurality of micro-resonator devices is composed of:

each of said plurality of micro-resonator devices has an input electrode on the same plane as the substrate that branches into at least two branched input electrodes,

each of said plurality of micro-resonator devices has an output electrode on the same plane as the substrate that branches into at least two branched output electrodes and the branched output electrodes are parallel to the branched input electrodes,

each of said plurality of micro-resonator devices has a space between the branched input electrodes and the branched output electrodes, and

each of said plurality of micro-resonator devices has a vibrating electrode beam serving as a diaphragm crossing over the space between a branched input electrode and a branched output electrode and in an opposing relation to the input electrode and the output electrode and in an opposing relation to the input electrode and the output electrode.

5. (Currently Amended) A communication apparatus comprising:
a filter for band-limiting a transmission signal and/or a reception signal,

wherein the filter comprises:

a micro-resonator with a plurality of micro-resonator devices having a beam structure on a substrate,

the micro-resonator devices are electrically connected in parallel, and

the beam structure includes a at least two physically unconnected vibrating electrode beams that are parallel to each other and cross over a portion of the substrate beam.

6. (Previously Presented) A communication apparatus according to claim 5, wherein each of said plurality of micro-resonator devices in said filter includes:

an input electrode on the same plane as the substrate,
an output electrode on the same plane as the substrate and parallel to the input electrode,
a space between the input electrode and the output electrode, and
an vibrating electrode beam serving as a diaphragm crossing over the space between the input electrode and the output electrode and in an opposing relation to the input electrode and the output electrode.

7. (Currently Amended) A communication apparatus comprising:
a filter for band-limiting a transmission signal and/or a reception signal,

wherein the filter comprises:

a micro-resonator with a plurality of micro-resonator devices having a beam structure on a substrate,

the micro-resonator devices are electrically connected in parallel, and
the beam structure includes a vibrating electrode beam,

A communication apparatus according to claim 5, wherein each of said plurality of micro-resonator devices in said filter includes:

each of said plurality of micro-resonator devices in said filter includes an
input electrode on the same plane as the substrate that branches into at
least two branched input electrodes,

each of said plurality of micro-resonator devices in said filter includes an
output electrode on the same plane as the substrate that branches into at least two
branched output electrodes and the branched output electrodes are parallel to the
branched input electrodes,

each of said plurality of micro-resonator devices in said filter includes a
space between the branched input electrodes and the branched output electrodes,

each of said plurality of micro-resonator devices in said filter includes a
vibrating electrode beam serving as a diaphragm crossing over the space between
a branched input electrode and a branched output electrode and in an opposing
relation to the input electrode and the output electrode and in an opposing relation
to the input electrode and the output electrode.

8. (Previously Presented) A communication apparatus according to claim 5, wherein
each of said plurality of micro-resonator devices in said filter includes:

an input electrode on the same plane as the substrate,
an output electrode on the same plane as the substrate and parallel to the input electrode,
a space between the input electrode and the output electrode,
more than one vibrating electrode beam crossing over the space between the input
electrode and the output electrode in an opposing relation to the input electrode and the output
electrode, each beam serving as a diaphragm and parallel to each other.